

Amendments to the Claims

A complete listing of all claims in this application is set forth below.

1. (Original) A method of manufacturing a photoreceptor includes the steps of:

providing a substrate to be coated with a charge transfer layer
("CTL");

providing a tube having an upper opening sized to receive the
substrate therethrough and configured to act as a solution outlet and a inlet
lower than the CTL outlet;

providing a motor driven pump for circulating CTL solution through
the tube by forcing the CTL solution through the lower inlet;

filling the tube with CTL solution;

circulating the CTL solution using the motor driven pump;

dipping the substrate in the tube;

withdrawing the substrate from the tube;

measuring the viscosity of the CTL solution and altering the pump
motor angular velocity to control the thickness of the CTL solution deposited on
the substrate.

2. (Currently amended) The method of claim 1 ~~wherein~~ the measuring of the
viscosity being step is performed during the withdrawing step.

3. (Currently amended) The method of claim 1 ~~wherein~~ the altering of the pump motor angular velocity ~~step is~~ being performed during the withdrawing step.

4. (Currently amended) The method of claim 3 ~~wherein~~ the measuring of the viscosity being ~~step is~~ performed during the withdrawing step.

5. (Currently amended) The method of claim 4 ~~wherein~~ the substrate being is a drum.

6. (Currently amended) The method of claim 1 ~~wherein~~ the circulating of the CTL solution ~~step~~ induces the CTL to have a vertical flow rate and the withdrawing of the substrate ~~step~~ is performed at a pull rate, and the pull rate is less than the vertical flow rate.

7. (Original) A method of controlling the thickness of a coating layer on a coated article manufactured using an immersion or dip coating process utilizing a dip tank through which a coating solution is pumped at an initial flow rate by a motor driven pump includes:

dipping the article in the dip tank;

sensing the viscosity of the coating solution;

withdrawing the article from the dip tank at a pull rate, said pull rate

and said flow rate exhibiting a differential rate;

adjusting the differential rate by altering the flow rate of the coating solution in response to the sensed viscosity.

8. (Currently amended) The method of claim 7 wherein the adjustment of the differential rate further comprising flow rate is altered by adjusting the angular velocity of the motor.

9. (Currently amended) The method of claim 7 and further comprising ~~the steps of~~ establishing a viscosity setpoint, and establishing a motor speed nominal velocity to generate the initial flow rate.

10. (Currently amended) The method of claim 9 wherein the adjustment of the differential rate further comprising adjusting the initial flow rate is ~~adjusted from the initial flow rate~~ when the sensed viscosity differs from the setpoint viscosity by a predetermined amount.

11. (Currently amended) The method of claim 10 wherein the predetermined amount is amount being between 5 to 30 centipoise.

12. (Currently amended) The method of claim 10 wherein the predetermined amount is amount being between about 15 and about 25 centipoise.

13. (Currently amended) The method of claim 10 ~~and further comprising the steps of repeating the sensing of the viscosity step after the adjusting the flow rate from the initial flow rate step and returning the flow rate to the initial flow rate~~ in response to the sensed viscosity when the differential between sensed viscosity and the setpoint viscosity is within a second predetermined amount.

14. (Currently amended) The method of claim 13 wherein the second predetermined ~~amount is~~ amount being substantially less than the first predetermined amount.

15. (Currently amended) The method of claim 14 ~~wherein the second predetermined amount is~~ amount being not more than about a half of the first predetermined amount.

16. (Currently amended) The method of claim 15 wherein the adjustment of the differential rate further comprising flow rate is adjusted by adjusting the angular velocity of the motor driving the pump.

17. (Withdrawn) A dip coating apparatus for immersion coating an article with a coating layer of a solution, the apparatus comprising:

a dip tank configured to receive the article therein, said dip tank including an upper opening sized to permit the article to pass therethrough, a solution outlet, and a solution inlet situated below the solution outlet;

a solution pumping system for pumping solution at a pump rate into the inlet of the dip tank to generate a vertical flow of solution within the dip tank between the inlet and the outlet, the pumping system comprising a motor driven pump fluidly coupled to a source of solution and the inlet of the dip tank;

a controller for adjusting the pump rate whereby adjustments to the pump rate vary the vertical flow rate of the solution;

a viscometer for measuring the viscosity of the solution, the viscometer providing an input to the controller indicative of the measured viscosity of the solution, and

wherein the controller adjusts the pump rate in response to the measured viscosity of the solution.

18. (Withdrawn) The apparatus of claim 17 wherein the controller controls the angular velocity of the motor.

19. (Withdrawn) The device of claim 18 and further comprising a plurality of such dip tanks, a manifold fluidly coupled to the pump and the inlets of the plurality of manifolds, a reservoir for capturing solution flowing out of the outlets of the plurality of dip tanks and being fluidly coupled to the pump.

20. (Withdrawn) The device of claim 19 wherein the viscometer is located in the pumping system disposed between the motor driven pump and the inlet of the dip tank.